

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 22, 27, and 28 as indicated below. Please cancel Claims 30-39 and 41-47 without prejudice. Please also add new Claims 48-59 as indicated below.

1. **(Currently Amended)** An optical product comprising:
a sheet of material having a surface, the surface comprising a plurality of optical elements comprised of microscopic ring patterns in the surface that cooperate to produce an image, each of the elements having optical power and a focal length, at least some of the focal lengths being substantially different from other focal lengths such that the optical power of the elements are different, such that some portions of the surface appear to be closer to a viewer than other portions of the surface when a viewer is disposed with respect to the surface multiple images of the viewer are formed at different distances from the surface.
2. **(Original)** The product of Claim 1, wherein the optical elements comprise Fresnel lenses.
3. **(Original)** The product of Claim 1, wherein the optical elements comprise diffractive optical elements.
4. **(Original)** The product of Claim 3, wherein the optical elements comprise holographic optical elements.
5. **(Original)** The product of Claim 1, wherein at least some of the focal lengths are positive and others of the focal lengths are negative.
6. **(Original)** The product of Claim 1, wherein the microscopic patterns comprise a plurality of grooves formed in the surface.
7. **(Original)** The product of Claim 6, wherein said plurality of grooves have an average spacing of between about 0.5 micrometers to about 2 millimeters.
8. **(Original)** The product of Claim 6, wherein said plurality of grooves have an average depth of between about 0.2 micrometers to about 200 micrometers.
9. **(Original)** The product of Claim 1, wherein said surface is substantially smooth on a macroscopic scale across a plurality of said optical elements.

Appl. No. : 10/805,850
Filed : March 22, 2004

10. **(Original)** The product of Claim 1, wherein said surface is substantially smooth on a macroscopic scale across a region of 1 centimeter or larger.

11. **(Original)** The product of Claim 1, wherein said sheet of material is substantially transmissive.

12. **(Original)** The product of Claim 1, wherein said sheet of material is reflective such that said image is a reflected image.

13. **(Original)** The product of Claim 12, wherein said sheet of material comprises a reflective layer.

14. **(Original)** The product of Claim 13, wherein said reflective layer comprises a layer of metallization.

15. **(Original)** The product of Claim 13, wherein said reflective layer comprises a thin film dielectric coating.

16. **(Original)** The product of Claim 1, wherein said sheet comprises material selected from the group consisting of paper, polyester, polycarbonate, polypropylene, acrylic, and glass.

17. **(Previously Presented)** The product of Claim 1, further comprising an adhesive formed on said sheet for adhering said sheet to a surface.

18. **(Original)** The product of Claim 1, further comprising a laminate disposed over the surface to produce a substantially smooth surface.

19. **(Original)** The product of Claim 1, wherein the sheet comprises a flexible sheet.

20. **(Original)** The product of Claim 1, wherein the sheet comprises a rigid sheet.

21. **(Original)** The product of Claim 1, wherein the optical elements are arranged in a pattern.

22. **(Currently Amended)** The product of Claim 1, wherein a plurality of said optical elements having substantially similar ~~focal lengths~~ optical power are included in a first region adjacent to a second region comprising a plurality of optical elements having substantially different ~~focal lengths~~ optical power.

23. **(Previously Presented)** The product of Claim 1, wherein a first plurality of said optical elements having substantially similar focal lengths are juxtaposed with respect to a

Appl. No. : 10/805,850
Filed : March 22, 2004

second plurality of said optical elements having substantially different focal lengths so as to form a pattern.

24. **(Original)** The product of Claim 23, wherein said pattern comprises a shape selected from the group consisting of a letter, a numeral, a character, and a symbol.

25. **(Original)** The product of Claim 1, wherein said optical elements comprise first and second optical elements superimposed on each other.

26. **(Original)** The product of Claim 25, wherein said microscopic patterns for said first and second optical elements comprise first and second microscopic patterns superimposed over each other.

27. **(Currently Amended)** The product of Claim 26, wherein said microscopic patterns for said first and second optical elements comprise first and second sets of ring-shaped optical surfaces-rings, respectively, both said first and second sets of ring-shaped optical surfaces-rings being concentric about a common center point.

28. **(Currently Amended)** The product of Claim 26, wherein said microscopic patterns for said first and second optical elements comprise first and second sets of ring-shaped optical surfaces-rings, respectively, said first and second sets of ring-shaped optical surfaces-rings being meshed together such that ring-shaped optical surfaces-rings from said first set are alternated with ring-shaped optical surfaces-rings from said second set along a path from an outer ring toward a central ring-shaped optical surfaces-ring.

29. **(Withdrawn)** A method of creating an optical effect from an image, the method comprising:

producing ten or more copies of the image arranged in side-by-side relationship, the producing comprising using microscopic patterns in a surface to form some of the copies at different distances from the viewer than other of the copies.

30. **(Canceled)**

31. **(Canceled)**

32. **(Canceled)**

33. **(Canceled)**

34. **(Canceled)**

35. **.(Canceled)**

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Withdrawn) A method of creating an optical effect from an image, the method comprising:

producing at least first and second copies of the image at least partially superimposed over each other, the producing comprising using microscopic patterns in a surface to form the first of the copies at different distances from the viewer than the second of the copies.

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Canceled)

47. (Canceled)

48. (New) The optical product of claim 1, wherein said ring patterns comprise a plurality of concentric rings.

49. (New) An optical product comprising:

a sheet of material having a surface, the surface comprising a plurality of optical elements comprised of microscopic patterns in the surface that cooperate to produce an image, each of the elements having optical power and a focal length, at least some of the focal lengths being substantially different from other focal lengths such that the optical power of the elements are different, such that when an object is disposed with respect to the surface multiple images of the object are formed at different distances from the surface.

50. (New) The optical product of Claim 48, wherein said microscopic patterns are symmetric patterns.

51. (New) The product of Claim 48, wherein at least one optical element having a first optical power is adjacent to at least one optical element having a second different optical power.

52. (New) The product of Claim 48, wherein movement of the object causes movement of the image of the object in a direction opposite from the movement of the object.

53. (New) An optical product comprising:

a sheet of material having a surface, the surface comprising a plurality of optical elements comprised of microscopic patterns in the surface that cooperate to produce an image, each of the elements having optical power and a focal length, at least some of the focal lengths being substantially different from other focal lengths such that the optical power of the elements are different, such that some portions of the surface appear to be closer to a viewer than other portions of the surface.

54. (New) The optical product of Claim 53, wherein said microscopic patterns are ring patterns.

55. (New) The optical product of Claim 53 or 54, wherein the optical elements comprise Fresnel lenses.

56. (New) The optical product of Claim 53 or 54, wherein the optical elements comprise holographic optical elements.

57. (New) The product of Claim 53, wherein at least one optical element having a first optical power is adjacent to at least one optical element having a second different optical power.

58. (New) The product of Claim 1, wherein at least one optical element having a first optical power is adjacent to at least one optical element having a second different optical power.

59. (New) The product of Claim 1, wherein movement of the viewer causes movement of the image of the viewer in a direction opposite from the movement of the viewer.